

ABSTRACT

A system and method for multi-dimensional color transformation apply constraints to the transformation function to preserve the presence or absence of particular color information while achieving high accuracy color match. With a
5 constrained multi-dimensional color transformation (CMT), a destination device, such as a color proofer, can provide an accurate color match relative to a source or "target" device, such as a printing press, and preserve dot integrity. In particular, the constraints can preserve selected color information that is present in an image
10 produced by the source device, and prevent addition of other selected color information that would not be present in the source device image. In a halftone imaging device, the constraints prevent the removal or addition of dots from and to the image produced by destination device.

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